NAVAIR

Environmental Program

Using Qualified Aerosol Paint Systems

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Preval Touch-Up Paint Applicators Replace Non-Qualified Systems

Corrosion control is the single most important preventative measure that can be taken to combat degradation of our fleet's aircraft and support equipment. Maintenance personnel should only be using qualified systems to perform touch-up painting.

One-ounce single component brush.

Sailors and marines, assigned to corrosion control departments, are being tasked to perform touch up corrosion control measures. Initial surveys have determined that much of the fleet is using unauthorized aerosol primers and topcoats. Many of these products are labeled to appear as if they were qualified products. The Aerospace Materials Division, Patuxent River, MD issued a message (Ref: R 251858Z JUN 01 ZYB, Subj; Unauthorized aerosol paints) to halt the use of non-qualified materials. Another solution was needed for the fleet to perform touch-up painting.

Preval paint sprayer set up.

Preval paint sprayer set up exposed.

The Naval Air Systems Command's (NAVAIR) Fleet Outreach Program, a team of individuals from multiple sites that perform demonstrations of emerging technologies at the deck-plate level, has traveled extensively throughout the warfighter community. One technology that was demonstrated included a touch-up paint system to replace aerosol lacquers. Various manufacturers were tasked to produce paint systems in a two (2) ounce (oz) capacity that could be easily used with a Preval Paint Sprayer, a small disposable hand-held sprayer.

The following table contains the reference information on the available paint systems.

Available Paint Systems

System	Military Specification
Primers	
	MIL-PRF-23377
	MIL-PRF-85582
Topcoats	
Two Component Polyurethane Topcoat	MIL-PRF-85285
Single Component Polyurethane Topcoat	MIL-PRF-81352, TY III

The topcoats are available in all platform colors. The Preval Paint Sprayer is intended for use on a maximum repair area of 36 square inches at one time. The Preval Paint Sprayer is not to be used to paint an entire helicopter blade, aircraft wing or any large area of concern. This sprayer offers an easy way to perform spot corrosion repairs on aircraft and support equipment without resulting in a full, unscheduled paint job.

Use of the Preval Paint Sprayer will greatly increase productivity by allowing the maintainer to combine premixed components in small amounts and not waste time measuring what they perceive as the correct amounts of both components. The 2-ounce two-component paints are pre-measured. All that is necessary prior to use is to combine one component into the other and mix by shaking the 2-ounce jar.

Questions & Answers About the Preval Sprayer

Q: When I turn the Preval Sprayer upside down, the paint does not spray properly.

A: In order for the Preval Sprayer to perform to specification, you may not spray beyond a 45-degree angle. Spray angles of 45 degrees or less will ensure the proper discharge of paint.

Q: Should I shake the paint mixture before or after I attach it to the Preval Sprayer?

A: You should mix and shake the contents BEFORE you attach it to the Preval Sprayer. The motion of "painting" should keep the contents properly mixed during the painting process.

Q: Are the Preval Sprayers available for purchase?

A: The Preval Spray systems are available for purchase. Interim Rapid Action Change (IRAC) #27 has been approved by the NA 01-1A-509 Cognizant Engineering Authority (CEA).

Q: What is the maximum area that I can/should spray with the Preval Sprayer?

A: The purpose of the Preval Spray Kit is to perform touch-up painting to an area up to and no larger than 36 square inches.

Q: What type of personal protective gear is required when using the Preval Sprayer?

A: Because you are spraying a "polyurethane" coating, you should still be concerned with protecting yourself from Isocyanates that are emitted during atomization (spraying). We recommend that painters protect themselves with the appropriate Personal Protection Equipment (PPE). The basic PPE required for Isocyanate is a forced air respirator. However, local industrial hygienists may establish additional PPE requirements for the Preval Sprayer where warranted.

Q: Which technology is the Preval Sprayer intended to replace?

A: The intent of the Preval Spray Kit is to offer the fleet an alternative to the "paint systems" currently used. Activities are known to use epoxies, lacquers and unqualified coatings, which provides very limited protection and quite often leaves the aircraft looking "spotty". What the Preval Kits offer are qualified coatings, MIL-PRF-85285 and MIL-PRF-81352 using either the Preval Sprayer or by applying by brush.

Q: How can I receive training on the proper use of the Preval Sprayer?

A: Training is available through the Naval Air Technical Data and Engineering Service Command (NATEC) or by calling Greg Garrett. Garrett is also available to make product presentations and demonstrations when necessary.

This also reduces the amount of hazardous waste generated by our warfighters by mixing more than they need and having to dispose of what they don't use. The MIL-PRF-85285 touch-up kits have a shelf life of 6 months. MIL-PRF-81352, TY III touch-up kits have a shelf life of one (1) year. Another version, the 1-ounce "white-out" style paint applicator, will also be introduced for the MIL-PRF-81352, TY III paint system. A small brush has been demonstrated and proven to be quite useful during an aircraft phase maintenance schedule under fleet evaluations. This method of applying paint is preferable to the fleet production control schedule for it allows other concurrent maintenance to be performed without the hazards to personnel caused by the application of paint that require spray equipment.

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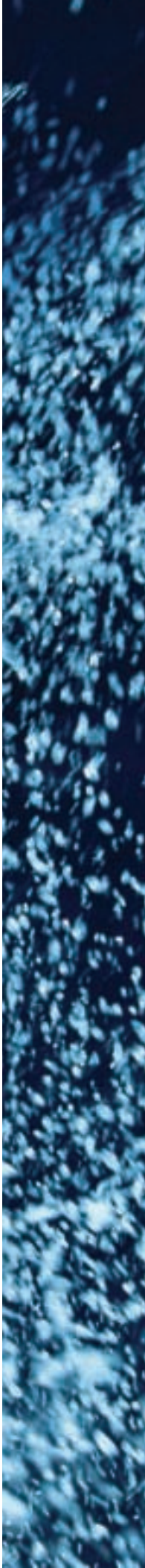
For more information about the NAVAIR environmental program, please visit our web site at https://www.enviro-navair.navy.mil.



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